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Patent
Attorney's Docket No. 018420-001

12-13
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	
James E. Trounson	Group Art Unit: 2306
Serial No.: 07/655,857	Examiner: T. Brown
Filed: February 15, 1991	
For: COMPUTER CONTROL SYSTEM FOR GENERATING GEOMETRIC DESIGNS	

REQUEST FOR RECONSIDERATION

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In response to the Office Action dated September 8, 1993, Applicant respectfully requests reconsideration and withdrawal of the rejections of claims 1-3, 18 and 19.

The rejections of claims 1-3, 18 and 19 as being anticipated by the Hyatt patent, under 35 U.S.C. §102, and as being unpatentable over the Daggett et al patent in view of the Hyatt patent, under 35 U.S.C. §103, were repeated. In addressing Applicant's previous response, the Office Action states that the real issue is whether the Hyatt patent discloses more than one active processor. In this regard, the Office Action states that "the only active processor in Hyatt's system is the data processor 12", and that there is no active processor in the servo control circuit of Figure 3.

Applicant agrees with the Examiner's statement that the determinative issue is whether the Hyatt patent discloses more than one active processor. In addressing this issue, the Office Action apparently is relying upon the fact that the Hyatt patent only identifies one component with the use of the word "processor", namely the device 12. The statement that there is no active processor in Figure 3 is apparently based on the fact that the Hyatt patent does not specifically use the word "processor" to identify any of the elements depicted therein.

The mere fact that the Hyatt patent does not use the term active processor, or the like, in describing the components of Figure 3 does not necessarily mean that the circuit of that figure does not include an active processor. The term "active processor" must be interpreted in the context with which it is used in the claims. In this regard, it is appropriate to refer to the specification, to determine the meaning given by that term to the Applicant. Referring to page 7, lines 16-20, the specification states:

> In the context of the present invention, the term "active" denotes a component or circuit which receives feedback information, processes it and carries out the operations necessary to complete a feedback loop.

Viewed in this context, it can be seen that the data processor 12 of the Hyatt machine control system is not the only active processor. In particular, it is not the only device within the system that performs the functions quoted above. Insofar as the feedback loop for control of the axial motors is concerned, the necessary operations for closing the loop are carried out in the individual servo circuit of Figure 3. In particular, the comparator circuit 86 and digital tachometer 92 receive the feedback information (the position feedback signal 83) for one axis, process it (to produce a position difference

signal 87 and a velocity duration signal 94), and carry out the operations necessary to complete the feedback loop for that axis (through the combination of the signals which is applied to the servo motor 99). These functions are performed outside of the data processor 12.

Thus, it can be appreciated that the servo control circuit of Figure 3 is an active processor, as that term is employed in the context of the present invention. As such, the data processor 12 of the Hyatt patent does not constitute a single active processor according to the present invention. In this regard, claim 1 recites that the single active processor performs the functions of (1) controlling the data defining means and the data converting means, (2) receiving feedback information from each of the feedback devices, and (3) controlling the operation of each of the motors. The data processor 12 of the Hyatt patent does not perform all of these functions. It does not receive feedback information from each of the feedback devices, i.e. the resolvers 78. In addition, the actual control of the operation of each of the motors is carried out individually within the servo circuits 20, 21 and 22, rather than the data processor 12.

Accordingly, it is respectfully submitted that the Hyatt patent does not disclose the concept of using a single active processor to provide coordinated control of movement along multiple axes, and therefore does not anticipate the subject matter of claims 1-3, 18 and 19. For the same reason, the Hyatt patent cannot be considered to render the claimed subject matter obvious when its teachings are combined with those of the Daggett et al patent.

Reconsideration and withdrawal of the rejection of claims 1-3, 18 and 19, and allowance of all claims pending in the application are respectfully requested.

Respectfully submitted,

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Date: December 8, 1993